

PARTS LIST

MODEL 12-40 40-70

YUBA BALL TREAD TRACTOR



YUBA MANUFACTURING COMPANY

BENICIA AND MARYSVILLE, CALIFORNIA

EXPLANATORY NOTE ON 40/70 CATALOGUE.

May 22, 1919.

Up to the present time it has been impossible to get out a catalogue for the 40/70 Yuba Ball Tread, but because of its similarity in a great many features to the model 12/20, this catalogue will serve to assist 40/70 owners in correctly ordering extras.

Be sure in placing orders to refer to the catalogue number and state clearly the number of tractor for which the part is required. Illustrations that do not agree with the 40/70 equipment have been crossed off and inserts have been made showing certain assemblies that will undoubtedly be beneficial. Prints are under way now illustrative of the motor parts, and will be forwarded to you as soon as completed.

We sincerely hope that this method will prove of convenience to you, and insure against errors being made in your ordering of parts and of our filling the same.

Be explicit in every detail. When ordering give method of shipment and destination; give the serial number of your tractor, and take care of this book as we have a very limited supply.

YUBA MANUFACTURING COMPANY.

LIST OF REPAIR PARTS

YUBA BALL TREAD TRACTOR

MODEL [REDACTED] 40-70

ISSUED BY

YUBA MANUFACTURING COMPANY

BENICIA AND MARYSVILLE, CALIFORNIA

Sales Office

433 California Street, San Francisco, Cal.

SERIAL No. _____

NOTE: Send all orders for repairs to the nearest dealer, or direct to Marysville. Be sure and mention Serial Number of your Tractor when ordering parts, besides giving "piece number," description and quantity wanted.

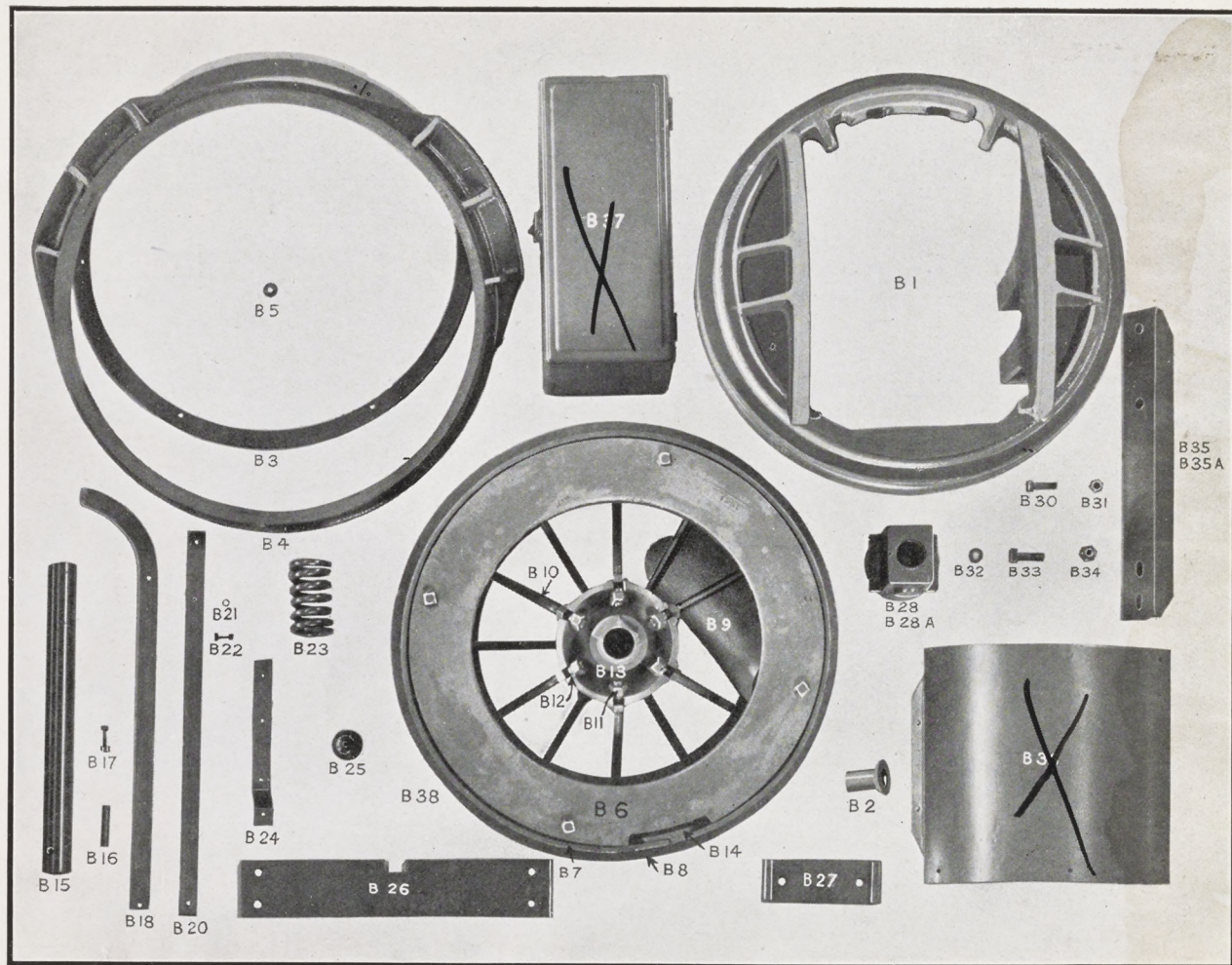


Plate No. 1—Front End

~~1-1-12-20~~

FRONT END

See Plate No. 1

Part No.	Name of Part	Specifications	Number Required Per Tractor
B-1	Front wheel fork	Casting	1
B-2	Front wheel bushing	Pin Metal	2
B-3	Front end ball race dust ring	Sheet Steel	1
B-4	Front end	Casting	1
B-5	Front end race ball	Steel 1" dia.	87
B-6	Front wheel side plate	Casting	2
B-7	Front wheel rim	Steel, 10" wide	1
B-8	Front wheel band	Steel, 1" x 1"	1
B-9	Sand scoop	Sheet Steel	1
B-10	Front wheel spoke	Steel Forging	12
B-11	Spoke nut	$\frac{5}{8}$ " U. S. St'd	24
B-12	Spoke nut lock washer	$\frac{5}{8}$ "	12
B-13	Front wheel hub	Casting	1
B-14	Front wheel butt strap	Steel Plate, $\frac{3}{8}$ " thick	1
B-15	Front wheel shaft	C. R. S.	1
B-16	Front wheel shaft pin	C. R. S.	1
B-17	Lower steering indicator bolt	$\frac{3}{8}$ " x $1\frac{1}{4}$ "	2
B-18	Steering indicator	Steel	1
B-20	Steering indicator brace	Steel	2
B-21	Upper steering indicator bolt lock washer	$\frac{1}{4}$ "	1
B-22	Upper steering indicator bolt	$\frac{1}{4}$ " x $1\frac{1}{4}$ "	1
B-23	Front wheel spring		2
B-24	Tool box support	Steel	2
B-25	Front wheel grease cup	$\frac{3}{8}$ " P. T.	1
B-26	Front wheel scraper	Steel	1
B-27	Front wheel fork tie plate	Casting	2
B-28	Front wheel sliding box	Casting	1
B-28A	Pinned front wheel sliding box	Casting	1
B-30	Front wheel scraper bolt	$\frac{1}{2}$ " x $1\frac{1}{2}$ "	4
B-31	Front wheel scraper bolt nut	$\frac{1}{2}$ " U. S. St'd	4
B-32	Front wheel fork tie plate bolt lockwasher	$\frac{5}{8}$ "	4
B-33	Front wheel fork tie plate bolt	$\frac{5}{8}$ " x $2\frac{1}{2}$ "	4
B-34	Front wheel fork tie plate bolt nut	$\frac{5}{8}$ " U. S. St'd	4
B-35	Front wheel scraper support—right	Steel	1
B-35A	Front wheel scraper support—left	Steel	1
B-36	Front wheel dust shield	Sheet Steel	1
B-37	Tool box		1
B-38	Front wheel complete		1
B-39	Angle clip for B-6		8

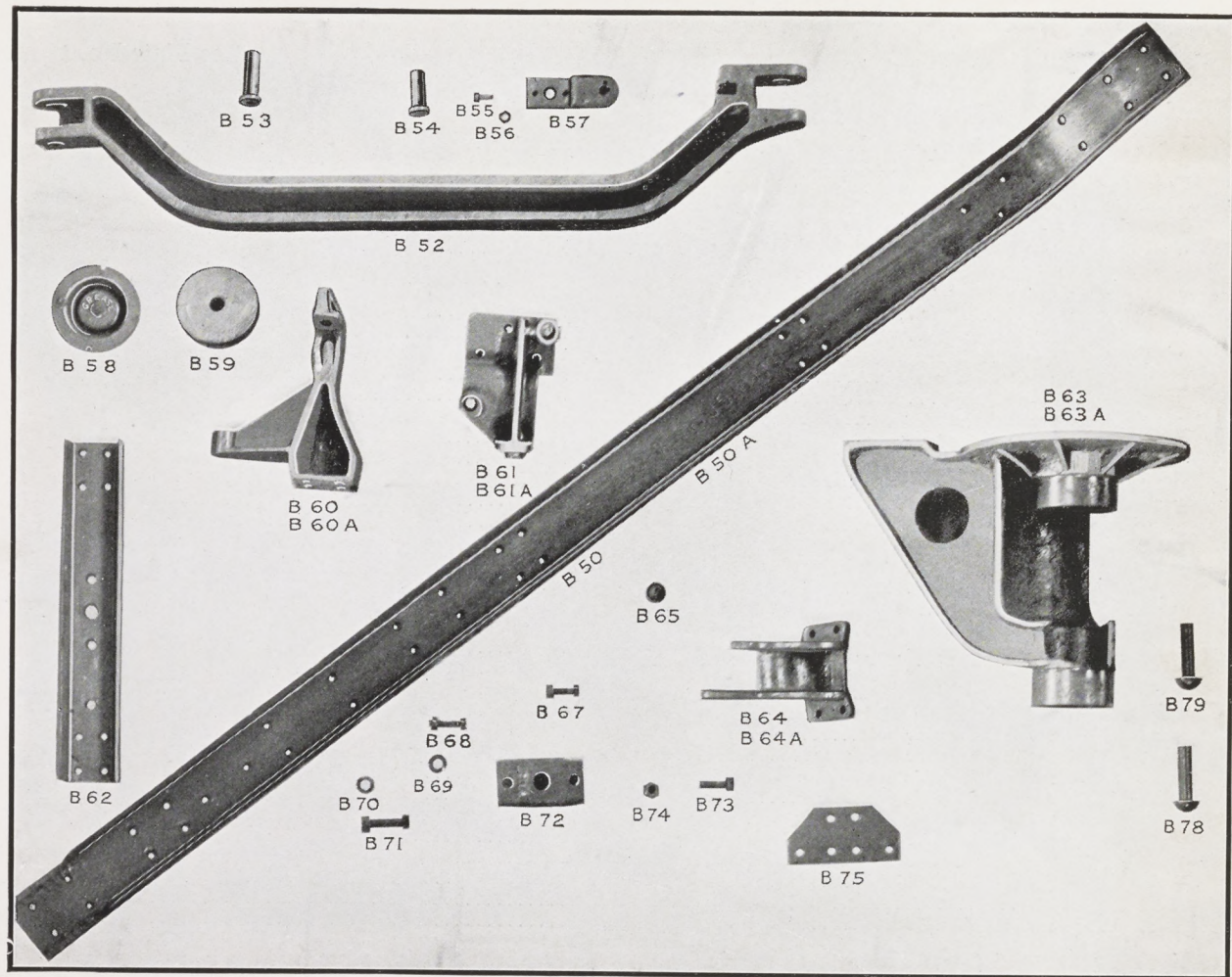


Plate No. 2—Main Frame and Various Other Parts

Part No.	Name of Part	Specifications	Number Required Per Tractor
B-50	Frame side member—right	5" Channel, 8' 6" long	1
B-50A	Frame side member—left	5" Channel, 8' 6" long	1
B-52	Draw bar	Casting	1
B-53	Pin for lower steering chain sheaves	Steel, 1" dia. x $3\frac{9}{16}$ " long	2
B-54	Pin for upper steering chain sheaves	Steel, 1" dia. x $2\frac{1}{16}$ " long	2
B-55	Cap screw for track guide bracket arm	$\frac{3}{8}$ " x 1"	4
B-56	Lock washer for B-55	$\frac{3}{8}$ "	4
B-57	Arm for track guide bracket	Steel Forging	2
B-58	Cross shaft end cap	Casting	2
B-59	Steering chain sheave	Casting	4
B-60	Track spring bracket—right	Casting	1
B-60A	Track spring bracket—left	Casting	1
B-61	Steering chain sheave bracket—right	Casting	1
B-61A	Steering chain sheave bracket—left	Casting	1
B-62	Frame cross member	4" Channel, 2' 0" long	1
B-63	Track arm—right	Casting	1
B-63A	Track arm—left	Casting	1
B-64	Track guide bracket—right	Casting	1
B-64A	Track guide bracket—left	Casting	1
B-65	Grease cup for steering chain sheaves	$\frac{1}{4}$ "	4
B-67	Bolt for track guide bracket	$\frac{1}{2}$ " x $1\frac{3}{4}$ "	8
B-68	Bolt for steering chain sheave bracket	$\frac{1}{2}$ " x $1\frac{3}{4}$ "	6
B-69	Lockwasher for B-68		6
B-70	Lockwasher for B-71		2
B-71	Bolt for drawbar filler block	$\frac{5}{8}$ " x $2\frac{1}{4}$ "	2
B-72	Drawbar filler block	Casting	1
B-73	Track spring bracket bolt	$\frac{5}{8}$ " x 2"	8
B-74	Nut for track spring bracket bolt	$\frac{5}{8}$ " U. S. St'd.	8
B-75	Frame cross member gusset	$\frac{1}{4}$ " Steel Plate	2
B-78	Rear drawbar pin	Steel, $1\frac{1}{8}$ " dia. x $4\frac{1}{2}$ " long	1
B-79	Forward drawbar pin	Steel, 1" dia. x $4\frac{1}{8}$ " long	1

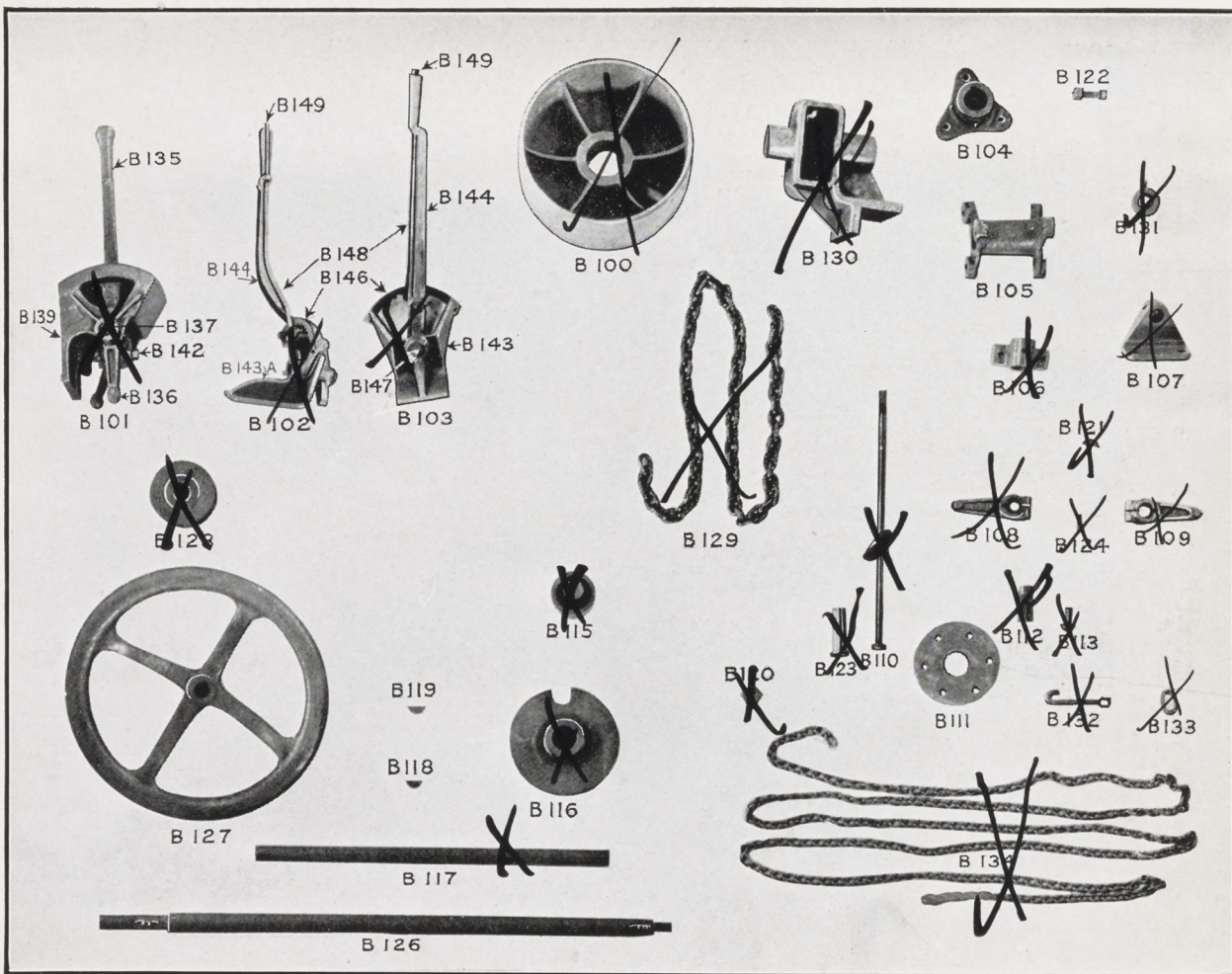


Plate No. 3—Steering Gears and Various Other Parts

Part No.	Name of Part	Specifications	Number Required Per Tractor
B-100	Pulley	Casting	1
B-101	Gear shift levers assembly		1
B-102	Left brake hand lever assembly		1
B-103	Right brake hand lever assembly		1
B-104	Transmission shaft universal joint spider	Casting	1
B-105	Universal joint center piece	Casting	1
B-106	Clutch cross shaft bearing	Casting	2
B-107	Clutch pedal bracket	Casting	1
B-108	Clutch release lever	Casting	2
B-109	Clutch release fork lever	Casting	1
B-110	Brake rod	Steel, $\frac{1}{2}$ " dia. x $18\frac{3}{8}$ " long.	2
B-111	Universal joint leather disc	$\frac{3}{16}$ " thick, 6" dia.	4
B-112	Brake rod yoke	Steel	5
B-113	Brake rod yoke pin	Steel, $\frac{1}{2}$ " dia. x $1\frac{1}{4}$ " long.	5
B-114	Brake hand lever pawl rod spring (omitted from plate)		2
B-115	Starting crank shaft	Steel	1
B-116	Pulley release disc	Casting	1
B-117	Clutch lever shaft	C. R. S., $1\frac{1}{8}$ " dia. x $24\frac{3}{16}$ " long	1
B-118	Steering wheel key	No. 21 Woodruff	1
B-119	Key for steering chain sprocket	No. 24 Woodruff	1
B-120	Steering wheel shaft nut	$\frac{3}{4}$ " U. S. St'd.	1
B-121	Key for clutch lever shaft	No. 18 Woodruff	3
B-122	Bolt for universal joint disc	$\frac{1}{2}$ " x $1\frac{3}{4}$ "	12
B-123	Clutch pedal shaft	Steel, 1" dia. x $3\frac{1}{16}$ " long.	1
B-124	Clutch pedal shaft set screw	$\frac{3}{8}$ " x $1\frac{1}{4}$ "	1
B-125	Brake hand lever pawl pin (omitted from plate)	Steel, $\frac{5}{16}$ " x $2\frac{1}{4}$ "	2
B-126	Steering wheel shaft	C. R. S.	1
B-127	Steering wheel	Casting	1
B-128	Steering chain sprocket	Casting	1
B-129	Chain for steering chain sprocket	Steel $\frac{5}{16}$ " dia.	1
B-130	Steering chain sprocket housing	Casting	1
B-131	Clutch lever shaft collar	Steel	2
B-132	Steering chain adjusting hook	Steel	2
B-133	Steering chain connecting link	Steel, $\frac{1}{4}$ " dia.	2
B-134	Steering chain front section	Machine Chain	2
B-135	Gear shift hand lever	Casting	1

(Continued on Page 9)

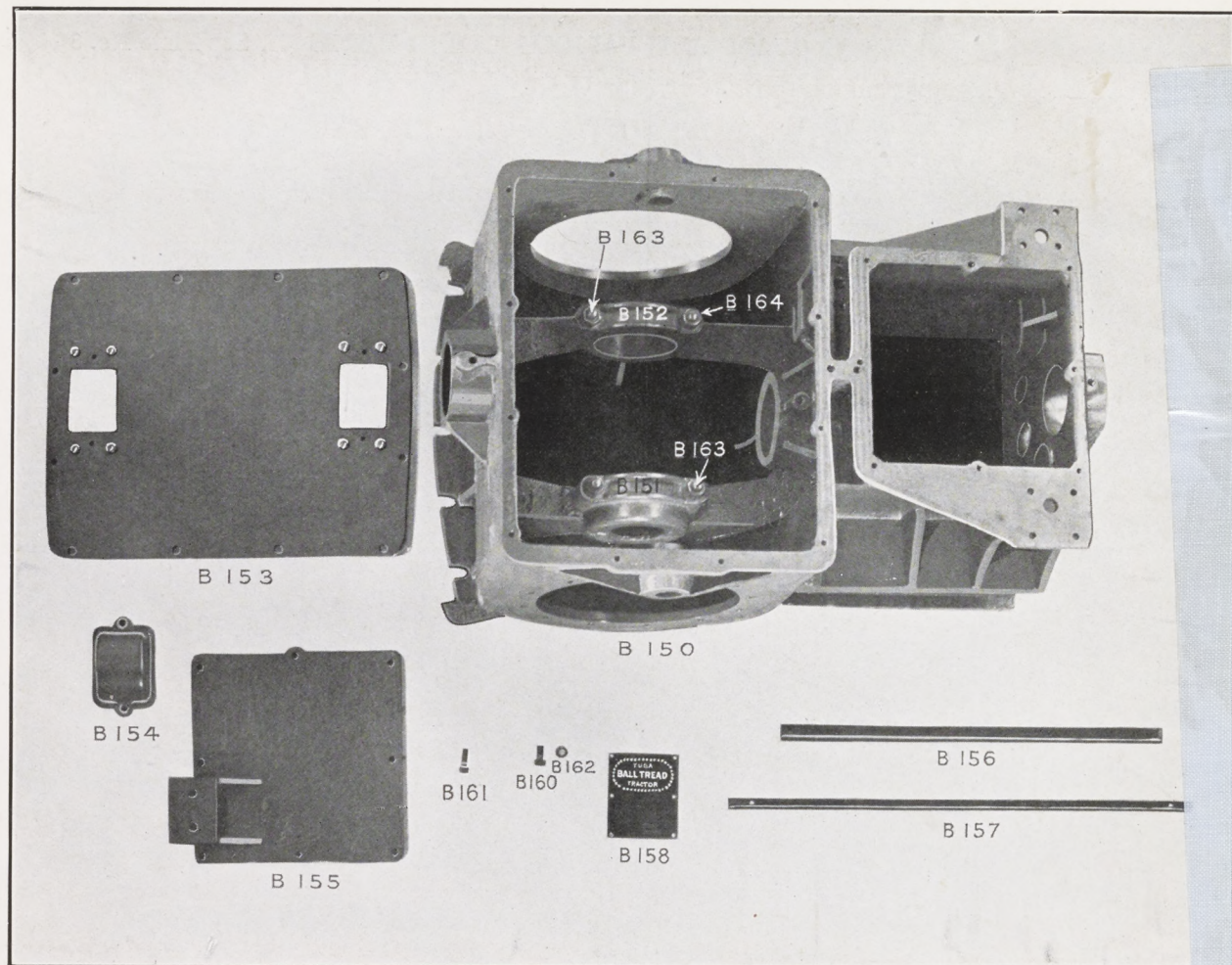
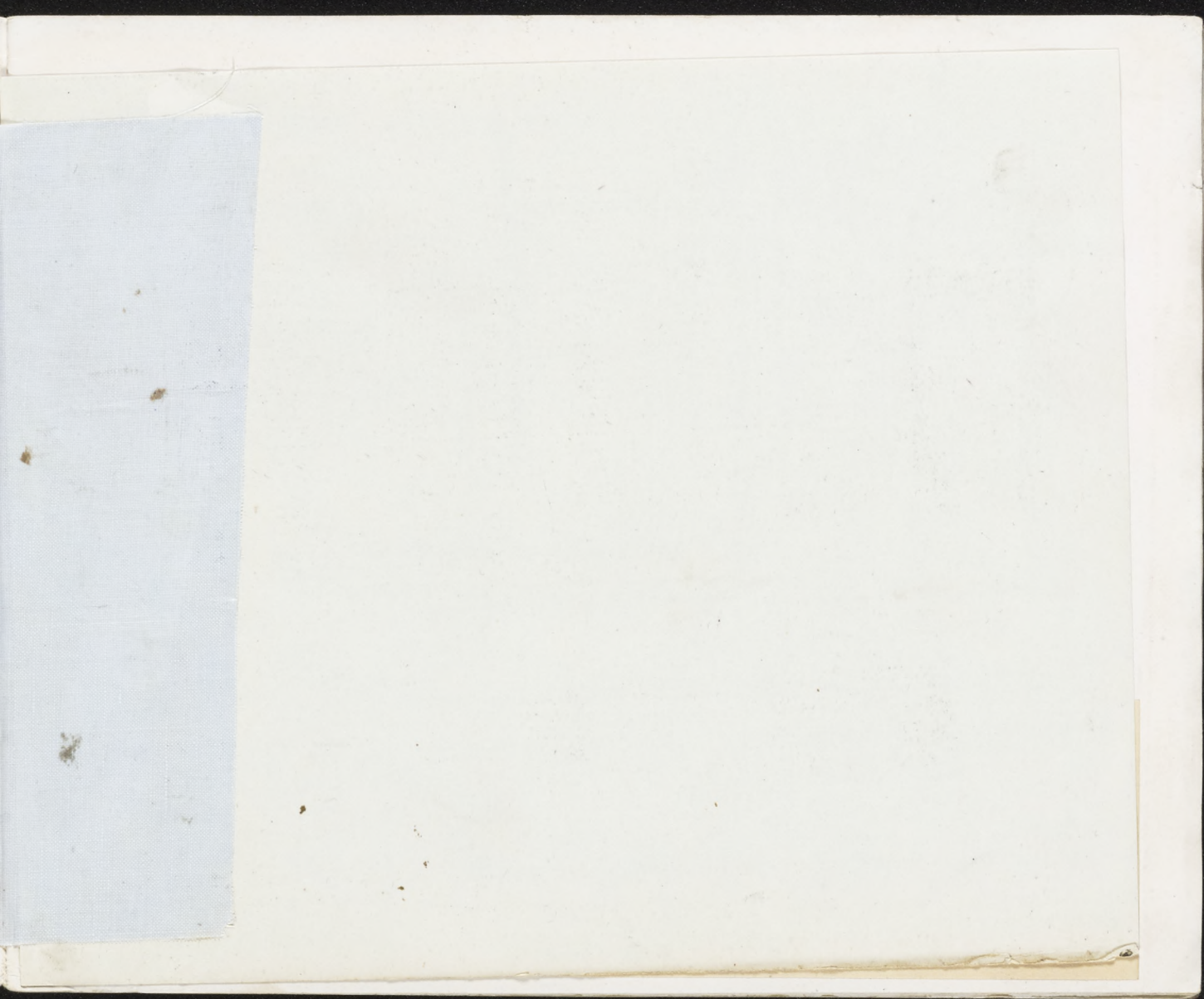


Plate No. 4—Transmission Case and Covers



Model 12/20 STEERING GEARS AND VARIOUS OTHER PARTS—Cont'd. See Plate No. 3

Part No.	Name of Part	Specifications	Number Required Per Tractor
B-136	Gear shift lever	Casting	2
B-137	Gear shift lever shaft	C. R. S., 1" dia. x 5 $\frac{3}{8}$ " long	1
B-138	Gear shift lever spring (omitted from plate)		2
B-139	Gear shift lever bracket	Casting	1
B-140	Gear shift lever shaft taper pin (omitted from plate)	No. 4, 2" long	1
B-141	Gear shift lever shaft collar (omitted from plate)	Casting	1
B-142	Gear shift hand lever bolt	$\frac{3}{8}$ " x 3"	1
B-143	Right brake lever bracket	Casting	1
B-143A	Left brake lever bracket	Casting	1
B-144	Brake hand lever	Casting	2
B-145	Pawl for brake lever ratchet (omitted from plate)		2
B-146	Brake ratchet segment	Steel	2
B-147	Brake hand lever pin	Steel, $\frac{3}{4}$ " x 3 $\frac{1}{4}$ "	2
B-148	Pawl rod for brake hand lever	C. R. S., $\frac{1}{4}$ " dia	2
B-149	Button for pawl rod brake hand lever	Steel	2

Model 12/20

TRANSMISSION CASE AND COVERS

See Plate No. 4

Part No.	Name of Part	Specifications	Number Required Per Tractor
B-150	Transmission case with bearing caps	Casting	1
B-151	Differential thrust bearing cap	Casting	1
B-152	Differential bearing cap	Casting	1
B-153	Rear transmission case cover	$\frac{1}{8}$ " Steel Plate	1
B-154	Front transmission case cover	Casting	2
B-165	Starting Crank stub shaft pin	$\frac{1}{2}$ " x 3 $\frac{1}{8}$ "	1
B-166	$\frac{3}{8}$ Hex nut for B-132		2
B-167	$\frac{3}{8}$ Set screw for B-131		2
B-168	Drive pin for belt pulley		1
B-169	Nut for belt pulley drive pin		1
B-170	Clutch pedal		1
B-171	Clutch pedal pin	$\frac{1}{2}$ " dia. x 1 $\frac{1}{4}$ "	2
B-172	Clutch pedal extension		1
B-173	Engine support brackets		4
B-174	Tie rod for track guide bracket	$\frac{3}{4}$ " x 26 $\frac{1}{8}$ "	1
B-175	Spacer for track guide bracket	$\frac{3}{4}$ " pipe x 22 $\frac{1}{8}$ " lg.	1

Model 12/20 STEERING GEARS AND VARIOUS OTHER PARTS—Cont'd. See Plate No. 3

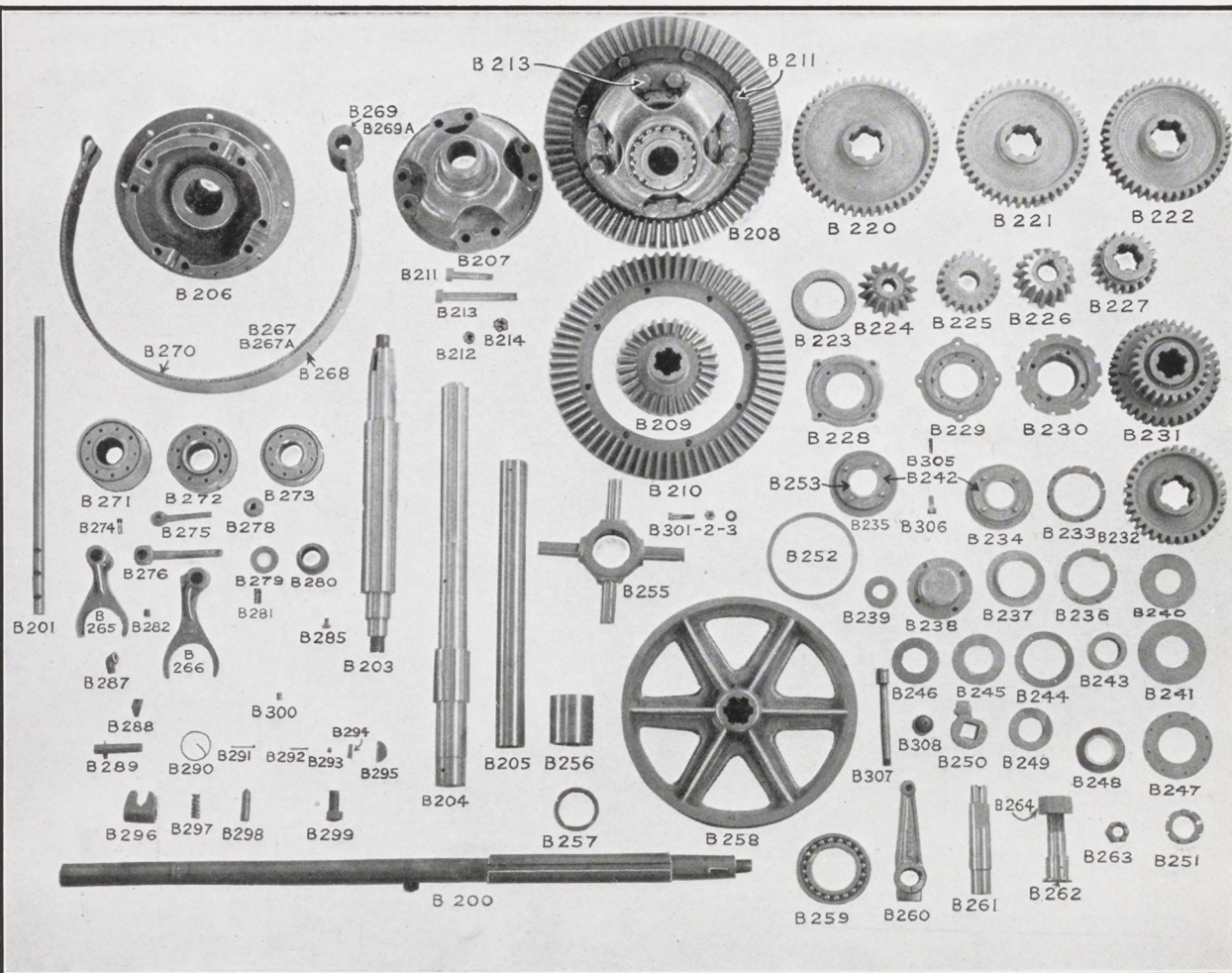
Part No.	Name of Part	Specifications	Number Required Per Tractor
B-136	Gear shift lever	Casting	2
B-137	Gear shift lever shaft	C. R. S., 1" dia. x 5 $\frac{3}{8}$ " long	1
B-138	Gear shift lever spring (omitted from plate)		2
B-139	Gear shift lever bracket	Casting	1
B-140	Gear shift lever shaft taper pin (omitted from plate)	No. 4, 2" long	1
B-141	Gear shift lever shaft collar (omitted from plate)	Casting	1
B-142	Gear shift hand lever bolt	$\frac{3}{8}$ " x 3"	1
B-143	Right brake lever bracket	Casting	1
B-143A	Left brake lever bracket	Casting	1
B-144	Brake hand lever	Casting	2
B-145	Pawl for brake lever ratchet (omitted from plate)		2
B-146	Brake ratchet segment	Steel	2
B-147	Brake hand lever pin	Steel, $\frac{3}{4}$ " x 3 $\frac{1}{4}$ "	2
B-148	Pawl rod for brake hand lever	C. R. S., $\frac{1}{4}$ " dia	2
B-149	Button for pawl rod brake hand lever	Steel	2

Model 12/20

TRANSMISSION CASE AND COVERS

See Plate No. 4

Part No.	Name of Part	Specifications	Number Required Per Tractor
B-150	Transmission case with bearing caps	Casting	1
B-151	Differential thrust bearing cap	Casting	1
B-152	Differential bearing cap	Casting	1
B-153	Rear transmission case cover	$\frac{1}{8}$ " Steel Plate	1
B-154	Brake adjusting hand hole cap	Casting	2
B-155	Front transmission case cover	Casting	1
B-156	Track spring bracket spacer	$\frac{3}{4}$ " pipe, 24 $\frac{1}{2}$ " long	1
B-157	Track spring bracket tie rod	Steel, $\frac{3}{4}$ " dia. x 29 $\frac{3}{4}$ " long	1
B-158	Name plate		1
B-160	Rear transmission case cover cap screw	$\frac{3}{8}$ " x 1"	12
B-161	Front transmission case cover cap screw	$\frac{3}{8}$ " x 1 $\frac{1}{4}$ "	8
B-162	Lockwasher for transmission case cover cap screw		20
B-163	Differential bearing cap stud	$\frac{5}{8}$ " x 4 $\frac{1}{2}$ "	4
B-164	Differential bearing cap stud nut	$\frac{5}{8}$ " U. S. St'd.	4



Model 12/20

TRANSMISSION

See Plate No. 5

Part No.	Name of Part	Specifications	Number Required Per Tractor
B-200	Transmission shaft	Ch. Ni. Steel	1
B-201	Gear shift bar	C. R. S., $\frac{7}{8}$ " dia., $21\frac{13}{16}$ " long	2
B-203	Counter shaft	Ch. Ni. Steel	1
B-204	Cross shaft	Ch. Ni. Steel	2
B-205	Transmission shaft bearing spacers	Steel	1
B-206	Right differential case	Casting	1
B-207	Left differential case	Casting	1
B-208	Complete assembly of differential and cross shaft drive bevel gear—inc. annular and thrust brg		1
B-209	Differential side gear	Steel, 28 T. 4 P.	2
B-210	Cross shaft drive bevel gear	Steel	1
B-211	Cross shaft drive bevel gear bolt	$\frac{1}{2}$ " x $1\frac{1}{2}$ " A. L. A. M.	8
B-212	Castle nut for cross shaft drive bevel gear bolt	$\frac{1}{2}$ " A. L. A. M.	8
B-213	Differential case bolt	$\frac{5}{8}$ " x $5\frac{1}{8}$ " A. L. A. M.	8
B-214	Castle nut for differential case bolt	$\frac{5}{8}$ " A. L. A. M.	8
B-220	Counter shaft low speed gear	Steel—Specify No. of Teeth	1
B-221	Counter shaft second speed gear	Steel—Specify No. of Teeth	1
B-222	Counter shaft reverse gear	Steel—Specify No. of Teeth	1
B-223	Differential thrust bearing	Medium Series, 75 mm. I. D.	1
B-224	Differential spider pinion	Steel, 15 T. 4 P.	1
B-225	Transmission reverse idler gear without bshg.	Specify No. of Teeth	1
B-226	Cross shaft drive bevel pinion	Steel—Specify No. of Teeth	1
B-227	Low and reverse sliding gear	Steel	1
B-228	Transmission shaft rear cap	Casting	1
B-229	Transmission shaft front cap	Casting	1
B-230	Counter shaft thrust bearing adjuster	Casting	1
B-231	Second and high sliding gear	Steel—Specify No. of Teeth	1
B-232	Counter shaft high speed gear	Steel—Specify No. of Teeth	1
B-233	Differential thrust bearing adjuster nut (right dif- ferential case)	Steel	1
B-234	Outer cross shaft bearing retaining plate assembly		2
B-235	Inner cross shaft bearing retaining plate assembly		2
B-236	Differential bearing retaining nut (left differential case)	Steel	1
B-237	Transmission shaft oil leather retaining ring		2
B-238	Counter shaft end cap	Casting	1
B-239	Counter shaft thrust bearing retaining washer	Steel, $1\frac{1}{16}$ " I. D., $2\frac{1}{4}$ " O. D., $\frac{3}{16}$ " thick	1
B-240	Pulley retaining washer	Steel, $1\frac{3}{32}$ " I. D., $3\frac{7}{8}$ " O. D., $\frac{3}{16}$ " thick	1

(Continued on Page 12)

Model 12/20

TRANSMISSION—Continued

See Plate No. 5

Part No.	Name of Part	Specifications	Number Required Per Tractor
B-241	Transmission shaft retaining plate.....	Bronze, 2 $\frac{1}{4}$ " I. D., 4 $\frac{5}{8}$ " O. D., $\frac{1}{4}$ " thick....	1
B-242	Cross shaft oil retaining ring plate.....	Steel, 2 $\frac{11}{32}$ " I. D., 3 $\frac{3}{4}$ " O. D., $\frac{3}{16}$ " thick....	4
B-243	Counter shaft thrust bearing.....	For 1 $\frac{3}{4}$ " Shaft.....	1
B-244	Transmission shaft oil retaining ring plate.....	Steel, 2 $\frac{11}{16}$ " I. D., 4" O. D., $\frac{3}{16}$ " thick.....	2
B-245	Rear counter shaft bearing retaining washer.....	Steel, 2" I. D., 3 $\frac{5}{8}$ " O. D., $\frac{7}{32}$ " thick.....	1
B-246	Differential spider pinion thrust washer.....	Bronze, 1" I. D., 2 $\frac{1}{2}$ " O. D., $\frac{3}{16}$ " thick.....	4
B-247	Inner cross shaft bearing retaining washer.....	Steel, 2 $\frac{9}{16}$ " I. D., 4 $\frac{3}{4}$ " O. D., $\frac{3}{16}$ " thick.....	2
B-248	Transmission shaft retaining collar.....	Steel.....	1
B-249	Transmission bearing retaining washer.....	Steel, 1 $\frac{3}{4}$ " I. D., 3 $\frac{1}{4}$ " O. D., $\frac{7}{32}$ " thick.....	8
B-250	Inner brake shaft lever.....	Casting.....	2
B-251	Transmission shaft rear bearing retaining nut.....	Steel.....	1
B-252	Track arm filler ring.....	Steel.....	2
B-253	Cross shaft oil leather retaining ring.....		4
B-255	Differential spider.....	Casting.....	1
B-256	Long counter shaft gear spacer.....	Casting.....	1
B-257	Short counter shaft gear spacer.....	Casting.....	1
B-258	Brake wheel.....	Casting.....	2
B-259	Differential bearing.....	75 mm. Bore, 130 mm. dia., 25 mm. wide....	2
B-260	Outer brake shaft lever.....	Casting.....	2
B-261	Brake lever shaft.....	Steel.....	2
B-262	Reverse idler gear shaft.....	Steel.....	2
B-263	Transmission and counter shaft end nut.....	Special 1" A. L. A. M.....	3
B-264	Reverse idler gear shaft nut.....	Steel, 1 $\frac{1}{4}$ " U. S. St'd.....	1
B-265	Low gear shift fork.....	Casting.....	1
B-266	High gear shift fork.....	Casting.....	1
B-267	Right brake band assembly (consists B-268-69-70).....		1
B-267A	Left brake band assembly (consists B-268-69A-70).....		1
B-268	Brake band.....	Steel, No. 14 Gauge, 3" x 4' 3 $\frac{5}{8}$ ".....	2
B-269	Right brake band end.....	Casting.....	1
B-269A	Left brake band end.....	Casting.....	1
B-270	Brake band lining.....	$\frac{1}{4}$ " x 3" x 39" long.....	2
B-271	Counter shaft rear bearing.....	Hyatt Roller, 2" I. D., 4 $\frac{3}{4}$ " O. D., 3" long.....	1
B-272	Cross shaft bearing.....	Hyatt Roller, 2" I. D., 4 $\frac{3}{4}$ " O. D., 1 $\frac{1}{2}$ " long.....	4
B-273	Transmission shaft and front counter shaft bearing.....	Hyatt Roller, 1 $\frac{3}{4}$ " I. D., 4 $\frac{1}{4}$ " O. D., 1 $\frac{3}{8}$ " long.....	4
B-274	Gear shift fork set screw.....	3 $\frac{3}{8}$ " x 1 $\frac{1}{4}$ ".....	2
B-275	Clutch pedal adjusting eyebolt.....	Steel.....	1

(Continued on Page 13)

Model 12/20

TRANSMISSION—Continued

See Plate No. 5

Part No.	Name of Part	Specifications	Number Required Per Tractor
B-276	Brake band adjusting eyebolt	Steel	2
B-277	Brake band adjusting spring (omitted from plate)		2
B-278	Brake band adjusting nut	Steel	2
B-279	Rear counter shaft end nut washer	Steel, $1\frac{1}{16}$ " I. D., $1\frac{1}{16}$ " O. D., $\frac{3}{16}$ " thick	2
B-280	Counter shaft thrust bearing sleeve	Steel	1
B-281	Rear counter shaft bearing retaining set screw	Special, $\frac{1}{2}$ " x 1"	1
B-282	Transmission bearing retaining set screw	$\frac{1}{2}$ " x $\frac{1}{2}$ ", Socket Head	5
B-285	Cap screw for front and rear transmission shaft cap	$\frac{5}{16}$ " x 1"	8
B-286	Reverse idler gear bushing (omitted from plate)	Bronze	1
B-287	Reverse idler gear shaft oil cup	Brass, $\frac{1}{4}$ ", Street Elbow	1
B-288	Counter shaft thrust bearing adjusting lock	Brass Casting	1
B-289	Brake band pin	C. R. S., $\frac{3}{4}$ " dia. x $3\frac{1}{8}$ " long	2
B-290	Transmission shaft rear bearing retaining nut lock		1
B-291	Differential case bolt cotter	$\frac{9}{64}$ " x $1\frac{1}{2}$ "	8
B-292	Cross shaft drive bevel gear bolt cotter	$\frac{7}{64}$ " x $1\frac{1}{4}$ "	8
B-293	Transmission bearing race retaining dowel	Steel, $\frac{25}{64}$ " dia. x $\frac{1}{32}$ "	5
B-294	Transmission bearing race retaining dowel spring		4
B-295	Cross shaft drive bevel pinion key	No. 9 Woodruff	1
B-296	Gear shift bar lever block	Casting	2
B-297	Gear shift lock spring	Brass	2
B-298	Gear shift lock	Steel	2
B-299	Gear shift lock adjusting screw	$\frac{3}{4}$ " x $1\frac{1}{2}$ "	2
B-300	Cross shaft bearing retaining screw		4
B-301	Brake hand lever bracket bolt	$\frac{3}{8}$ " x $1\frac{1}{2}$ "	8
B-302	Nut for brake hand lever bracket bolt	$\frac{3}{8}$ " U. S. St'd.	8
B-303	Lockwasher for brake hand lever bracket bolt	$\frac{3}{8}$ "	8
B-305	Oil retaining ring stud	$\frac{1}{4}$ " x $1\frac{1}{4}$ "	24
B-306	Cap screw for counter shaft end cap	$\frac{3}{8}$ " x 1"	4
B-307	Rear transmission shaft bearing grease pipe	$\frac{1}{4}$ " x 4"	1
B-308	Front transmission shaft bearing grease cup	$\frac{1}{4}$ "	1
B-309	Differential case bushing	bronze	2
B-310	Inside differential pinion bushing		4
B-311	Rear main transmission shaft sleeve		1
B-312	Outside cross shaft bearing retaining plate		2
B-313	Inside cross shaft bearing retaining plate		2
B-314	Studs for cross shaft bearing retaining plate	$\frac{1}{4}$ x $1\frac{1}{4}$	16
B-315	Nuts for cross shaft bearing retaining plate	$\frac{1}{4}$ hex nuts	16
B-316	Dowel for inside cross shaft		6
B-317	Gaskets between track arms and transmission case		2
B-318	Gasket for front transmission case cover		1
B-319	Gasket for rear transmission case cover		1

Model 12/20

TRANSMISSION—Continued

See Plate No. 5

Part No.	Name of Part	Specifications	Number Required Per Tractor
B-241	Transmission shaft retaining plate	Bronze, $2\frac{1}{4}$ " I. D., $4\frac{5}{8}$ " O. D., $\frac{1}{4}$ " thick	1
B-242	Cross shaft oil retaining ring plate	Steel, $2\frac{11}{32}$ " I. D., $3\frac{3}{4}$ " O. D., $\frac{3}{16}$ " thick	4
B-243	Counter shaft thrust bearing	For $1\frac{3}{4}$ " Shaft	1
B-244	Transmission shaft oil retaining ring plate	Steel, $2\frac{13}{16}$ " I. D., 4" O. D., $\frac{3}{16}$ " thick	2
B-245	Rear counter shaft bearing retaining washer	Steel, 2" I. D., $3\frac{5}{8}$ " O. D., $\frac{3}{32}$ " thick	1
B-246	Differential spider pinion thrust washer	Bronze, 1" I. D., $2\frac{1}{2}$ " O. D., $\frac{3}{16}$ " thick	4
B-247	Inner cross shaft bearing retaining washer	Steel, $2\frac{9}{16}$ " I. D., $4\frac{3}{4}$ " O. D., $\frac{3}{16}$ " thick	2
B-248	Transmission shaft retaining collar	Steel	1
B-249	Transmission bearing retaining washer	Steel, $1\frac{3}{4}$ " I. D., $3\frac{1}{4}$ " O. D., $\frac{7}{32}$ " thick	8
B-250	Inner brake shaft lever	Casting	2
B-251	Transmission shaft rear bearing retaining nut	Steel	1
B-252	Track arm filler ring	Steel	2
B-253	Cross shaft oil leather retaining ring		4
B-255	Differential spider	Casting	1
B-256	Long counter shaft gear spacer	Casting	1
B-257	Short counter shaft gear spacer	Casting	1
B-258	Brake wheel	Casting	2
B-259	Differential bearing	75 mm. Bore, 130 mm. dia., 25 mm. wide	2
B-260	Outer brake shaft lever	Casting	2
B-261	Brake lever shaft	Steel	2
B-262	Reverse idler gear shaft	Steel	2
B-263	Transmission and counter shaft end nut	Special 1" A. L. A. M.	3
B-264	Reverse idler gear shaft nut	Steel, $1\frac{1}{4}$ " U. S. St'd	1
B-265	Low gear shift fork	Casting	1
B-266	High gear shift fork	Casting	1
B-267	Right brake band assembly (consists B-268-69-70)		1
B-267A	Left brake band assembly (consists B-268-69A-70)		1
B-268	Brake band	Steel, No. 14 Gauge, 3" x 4' $3\frac{5}{8}$ "	2
B-269	Rigid		1
B-269A	Left		
B-270	Brake		
B-271	Coupler		
B-272	Cross		
B-273	Track		
B-274	Gear		
B-275	Clutch		

Part No.	Name of Part	Specifications	Number Required Per Tractor
B-276	Brake band adjusting eyebolt	Steel	2
B-277	Brake band adjusting spring (omitted from plate)		2
B-278	Brake band adjusting nut	Steel	2
B-279	Rear counter shaft end nut washer	Steel, $1\frac{1}{16}$ " I. D., $1\frac{1}{16}$ " O. D., $\frac{3}{16}$ " thick	2
B-280	Counter shaft thrust bearing sleeve	Steel	1
B-281	Rear counter shaft bearing retaining set screw	Special, $\frac{1}{2}$ " x 1"	1
B-282	Transmission bearing retaining set screw	$\frac{1}{2}$ " x $\frac{1}{2}$ ", Socket Head	5
B-285	Cap screw for front and rear transmission shaft cap	$\frac{5}{16}$ " x 1"	8
B-286	Reverse idler gear bushing (omitted from plate)	Bronze	1
B-287	Reverse idler gear shaft oil cup	Brass, $\frac{1}{4}$ ", Street Elbow	1
B-288	Counter shaft thrust bearing adjusting lock	Brass Casting	1
B-289	Brake band pin	C. R. S., $\frac{3}{4}$ " dia. x $3\frac{1}{8}$ " long	2
B-290	Transmission shaft rear bearing retaining nut lock		1
B-291	Differential case bolt cotter	$\frac{9}{64}$ " x $1\frac{1}{2}$ "	8
B-292	Cross shaft drive bevel gear bolt cotter	$\frac{7}{64}$ " x $1\frac{1}{4}$ "	8
B-293	Transmission bearing race retaining dowel	Steel, $\frac{25}{64}$ " dia. x $\frac{17}{32}$ "	5
B-294	Transmission bearing race retaining dowel spring		4
B-295	Cross shaft drive bevel pinion key	No. 9 Woodruff	1
B-296	Gear shift bar lever block	Casting	2
B-297	Gear shift lock spring	Brass	2
B-298	Gear shift lock	Steel	2
B-299	Gear shift lock adjusting screw	$\frac{3}{4}$ " x $1\frac{1}{2}$ "	2
B-300	Cross shaft bearing retaining screw		4
B-301	Brake hand lever bracket bolt	$\frac{3}{8}$ " x $1\frac{1}{2}$ "	8
B-302	Nut for brake hand lever bracket bolt	$\frac{3}{8}$ " U. S. Std.	8
B-303	Lockwasher for brake hand lever bracket bolt	$\frac{3}{8}$ "	8
B-305	Oil retaining ring stud	$\frac{1}{4}$ " x $1\frac{1}{4}$ "	24
B-306	Cap screw for counter shaft end cap	$\frac{3}{8}$ " x 1"	4
B-307	Rear transmission shaft bearing grease pipe	$\frac{1}{4}$ " x 4"	1
B-308	Rear transmission shaft bearing grease cup	$\frac{1}{4}$ "	1

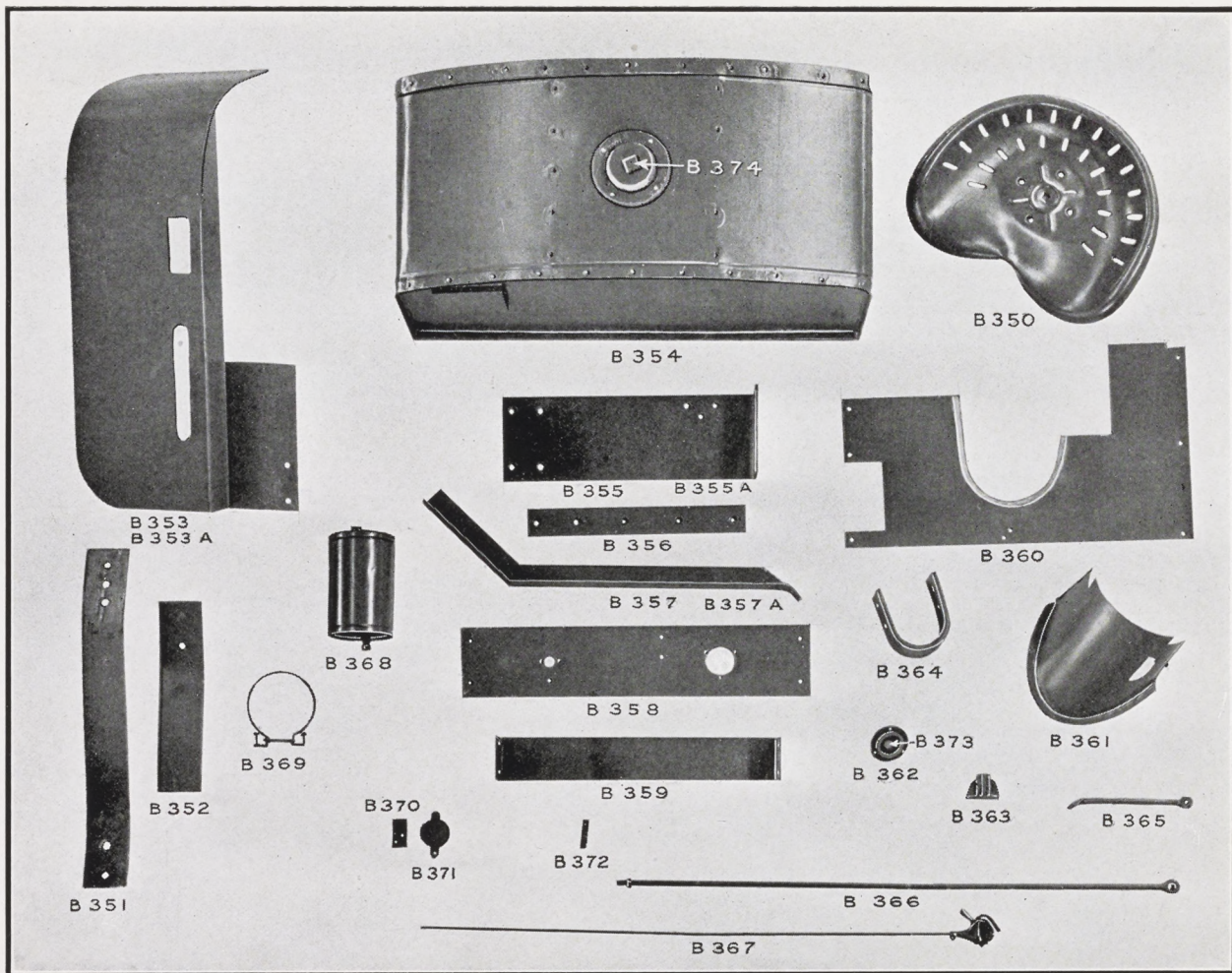


Plate No. 6—Fuel Tank Supports, Seat, Etc.

Model 12/20

FUEL TANK SUPPORTS, SEAT, ETC.

See Plate No. 6

Part No.	Name of Part	Specifications	Number Required Per Tractor
B-350	Seat.....	Pressed Steel.....	1
B-351	Long seat spring leaf.....	Spring Steel.....	1
B-352	Short seat spring leaf.....	Spring Steel.....	1
B-353	Right track fender.....	Steel.....	1
B-353A	Left track fender.....	Steel.....	1
B-354	Fuel tank with filler cap.....	Galv. Sheet Steel.....	1
B-355	Right fuel tank support.....	Steel.....	1
B-355A	Left fuel tank support.....	Steel.....	1
B-356	Track fender support.....	Steel.....	2
B-357	Right floor plate support.....	Steel.....	1
B-357A	Left floor plate support.....	Steel.....	1
B-358	Upper floor plate.....	Steel Plate, $\frac{3}{16}$ " thick.....	1
B-359	Fuel tank support brace.....	Steel.....	1
B-360	Lower floor plate.....	Steel Plate, $\frac{3}{16}$ " thick.....	1
B-361	Engine drive shield.....	Sheet Steel.....	1
B-362	Oil sight feed.....		1
B-363	Throttle control bracket.....	Casting.....	1
B-364	Seat spring extension.....	Steel.....	1
B-365	Fuel tank to engine brace.....	Steel.....	1
B-366	Radiator brace rod.....	Steel.....	1
B-367	Throttle control.....		1
B-368	Carburetor priming tank.....	Sheet Steel.....	1
B-369	Priming tank support strap.....	Steel.....	2
B-370	Floor plate clip.....	Steel.....	1
B-371	Ignition switch cover.....	Sheet Steel.....	1
B-372	Fuel tank stud.....	$\frac{1}{2}$ " x $1\frac{5}{8}$ ".....	4
B-373	Oil sight feed glass.....		1
B-374	Fuel tank filler cap.....	Casting.....	1

Model 12/20

ENGINE FITTINGS AND TOOLS

See Plate No. 7

Part No.	Name of Part	Specifications	Number Required Per Tractor
B-400	Air cleaner.....		1
B-401	Hot air pipe—air heater to air cleaner.....	2" I. D. x 10" long, Flexible Tubing.....	1
B-402	Hot air pipe—air cleaner to carburetor.....	2" I. D. x 45" long, Flexible Tubing.....	1
B-403	Air cleaner support strap.....	Steel.....	1
B-404	Air cleaner support strap bolt.....	$\frac{1}{4}$ " x $\frac{3}{4}$ ".....	2

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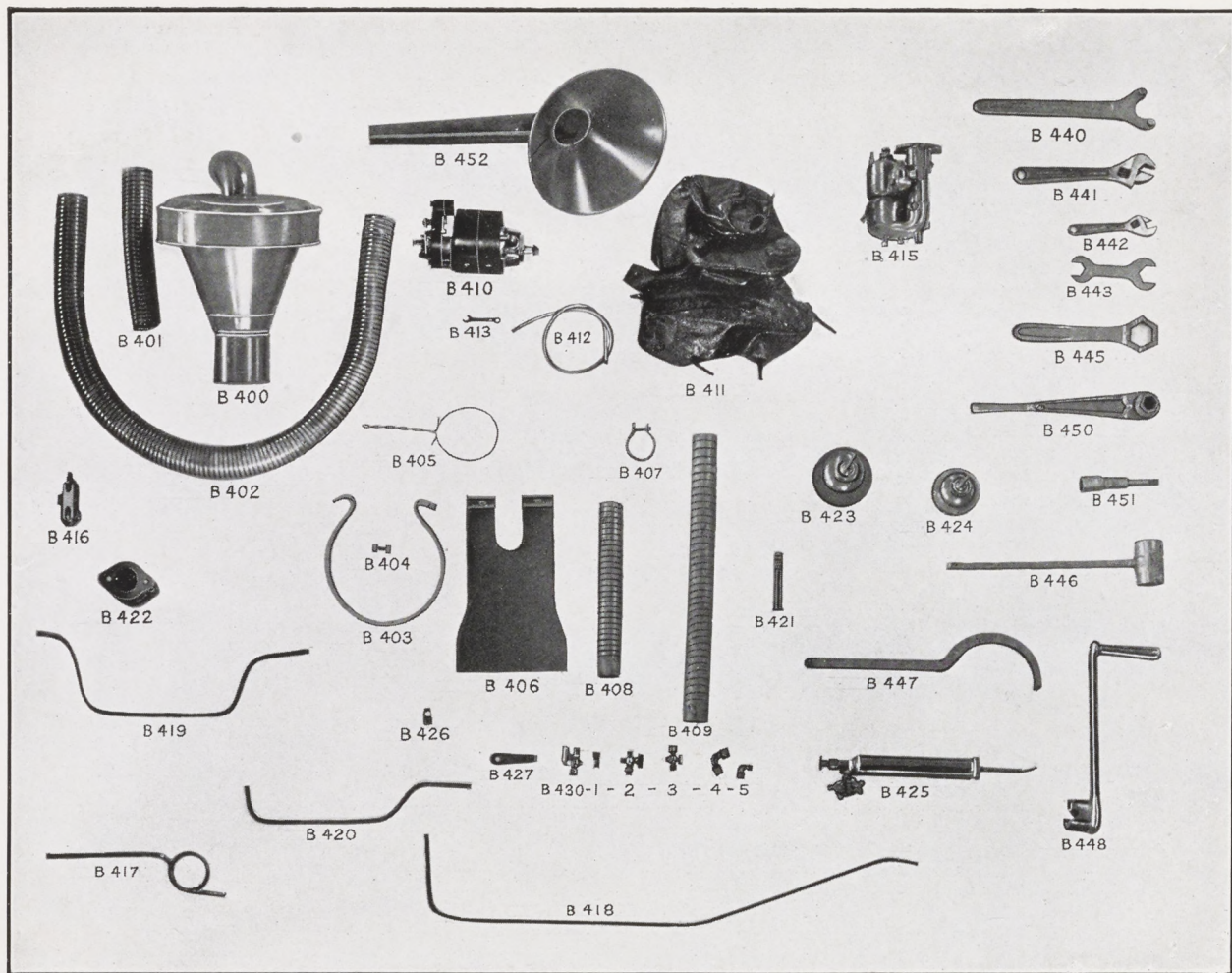


Plate No. 7—Engine Fittings and Tools

Part No.	Name of Part	Specifications	Number Required Per Tractor
B-405	Air cleaner wire brace.....		1
B-406	Air cleaner support plate.....	Steel Plate, $\frac{1}{8}$ " Thick.....	1
B-407	Radiator hose clamp.....	$1\frac{1}{4}$ ".....	4
B-408	Upper radiator hose.....	Rubber, $1\frac{1}{4}$ " dia. x 12" long.....	1
B-409	Lower radiator hose.....	Rubber, $1\frac{1}{4}$ " dia. x 20" long.....	1
B-410	Magneto.....	Bosch, Set Spark, D. U. 4.....	1
B-411	Magneto cover.....	Canvas.....	1
B-412	Magneto to ignition switch cable.....	Low Tension, 2' long.....	1
B-413	Magneto wrench.....		1
B-415	Carburetor.....	Ensign, $1\frac{1}{4}$ ".....	1
B-416	Fuel sediment trap.....		1
B-417	Fuel pipe—sediment trap to Carburetor.....	Copper, $\frac{5}{16}$ " dia. x 22" long.....	1
B-418	Carburetor priming tank pipe.....	Copper, $\frac{1}{4}$ " dia. x 38" long.....	1
B-419	Oil pump to sight feed pipe.....	Copper, $\frac{1}{4}$ " dia. x 25" long.....	1
B-420	Oil sight feed to engine pipe.....	Copper, $\frac{3}{8}$ " dia. x 18" long.....	1
B-421	Magneto oiler.....		1
B-422	Intake manifold extension.....	Casting.....	1
B-423	Large oiler.....		1
B-424	Small oiler.....		1
B-425	Grease gun.....		1
B-426	Oil pump compression pipe coupling.....	$\frac{1}{8}$ " P. T. $\frac{1}{4}$ " dia. Pipe.....	1
B-427	Throttle control wire holder.....	Steel.....	1
B-430	Carburetor priming petcock.....	$\frac{1}{8}$ " Male and Female.....	1
B-431	Carburetor compression pipe coupling.....	$\frac{1}{8}$ " P. T. $\frac{5}{16}$ " dia. Pipe.....	2
B-432	Sediment trap drain cock.....	Brass, $\frac{1}{8}$ ".....	1
B-433	Fuel feed stop cock.....	Brass, $\frac{1}{4}$ " Male and Female.....	1
B-434	Elbow for oil feed pipe.....	$\frac{3}{8}$ " dia., Pipe, Brass.....	1
B-435	Elbow for carburetor priming pipe.....	Brass, $\frac{1}{8}$ ".....	1
B-440	Track adjusting wrench.....	Casting.....	1
B-441	10" crescent adjustable wrench.....		1
B-442	6" crescent adjustable wrench.....		1
B-443	Valve adjusting wrench.....		1
B-445	Valve chamber plug wrench.....		1
B-446	Box wrench for $\frac{3}{4}$ " nut.....	Casting.....	1
B-447	Cross shaft end cap spanner wrench.....	Casting.....	1
B-448	Starting crank.....	Casting.....	1
B-450	Track bolt socket wrench.....		1
B-451	Track bolt nut socket.....	Steel.....	1
B-452	Track oil funnel.....	Sheet Steel.....	1
B-453	Wrench for $\frac{3}{4}$ nuts on track arms.....		1

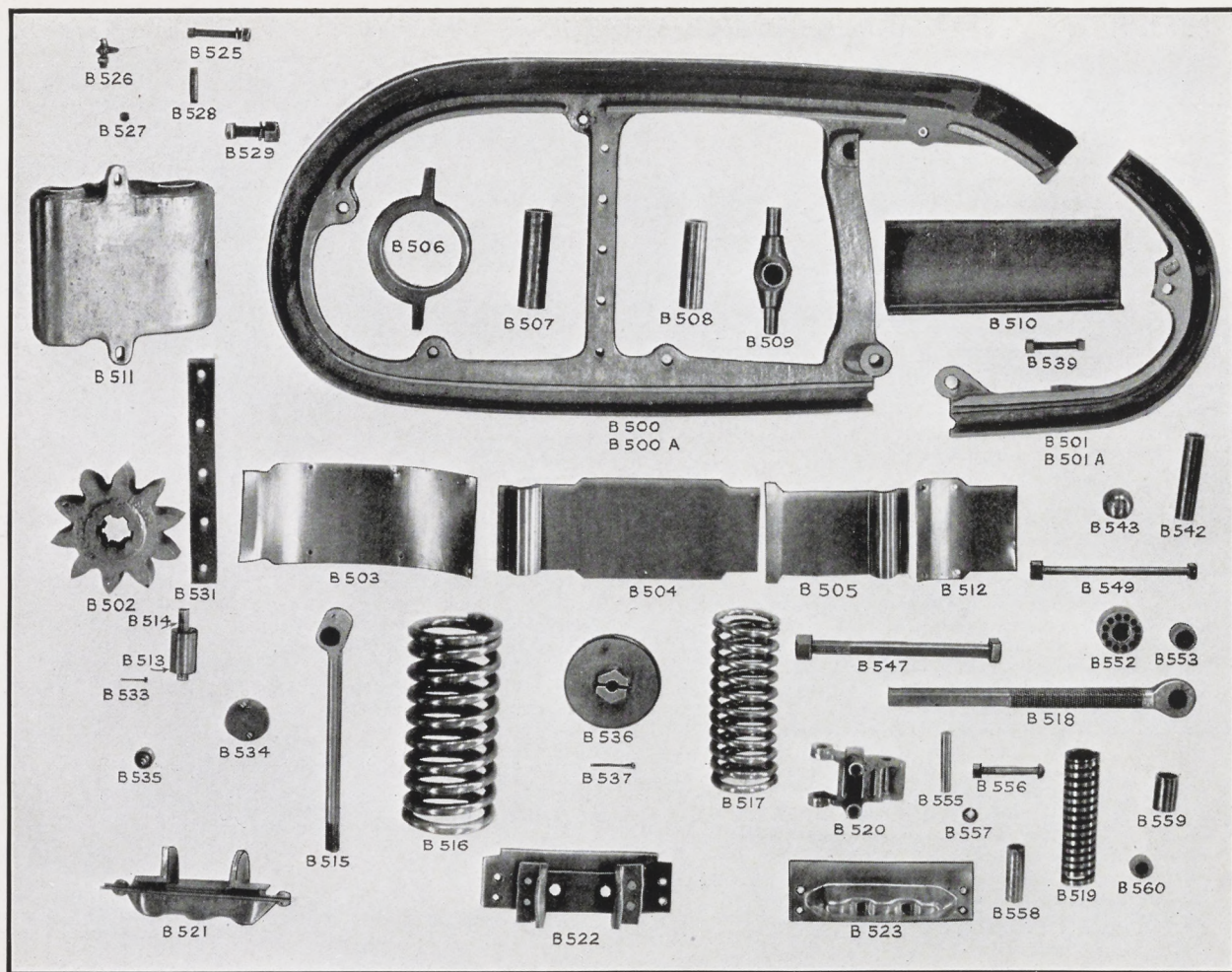


Plate No. 8—Ball Race and Tread

Part No.	Name of Part	Specifications	Number Required Per Tractor
B-500	Ball tread race—right-hand	Casting	2
B-500A	Ball tread race—left-hand	Casting	2
B-501	Ball tread race front end—right-hand	Casting	2
B-501A	Ball tread race front end—left-hand	Casting	2
B-502	Bull pinion	Casting	2
B-503	Ball race dust shield rear section	Sheet Steel	2
B-504	Ball race dust shield third section	Sheet Steel	2
B-505	Ball race dust shield second section	Sheet Steel	2
B-506	Track bearing	Casting	4
B-507	Ball race hinge bolt pipe spacer	1" W. Pipe	2
B-508	Heavy ball race pipe spacer	1 1/4" XX W. Pipe	8
B-509	Track adjusting spring yoke	Casting	2
B-510	Ball race stiffener	1/4" Steel Plate	2
B-511	Track oil box	Casting	2
B-512	Ball race dust shield front section	Sheet Steel	2
B-513	Track guide roller	Steel	4
B-514	Track guide roller pin	Steel, 3/4" dia. x 4 11/32"	4
B-515	Track spring rod	Steel Forging	2
B-516	Outside track support spring		2
B-517	Inside track support spring		2
B-518	Track adjusting rod	Steel Forging	2
B-519	Track adjusting spring		2
B-520	Tread link	Manganese Steel Casting	60
B-521	Tread assembled—complete		60
B-522	Inside tread plate with angles	Steel	60
B-523	Grouser plate	High Carbon Pressed Steel	60
B-525	Track oil box holding bolt	1/2" x 3 1/4"	4
B-526	Track oil cock	Brass, 1/4" Male and Female Lever Handle	6
B-527	Drain plug for track oil box	3/8" Pipe Plug	2
B-528	Track oil pipe	1/4" W. Pipe x 2 1/2"	6
B-529	Track bearing bolt	3/4" x 2 1/2"	8
B-531	Ball race stiffener shim	Sheet Steel	2
B-533	Cotter for track guide roller pin	3/32" x 1 1/2"	4
B-534	Track oil box filler cover	Sheet Steel	2
B-535	Grease cup for track guide roller	1/4" P. T.	4
B-536	Track spring washer	Casting	2
B-537	Cotter for track spring rod	5/32" x 2 1/2"	2

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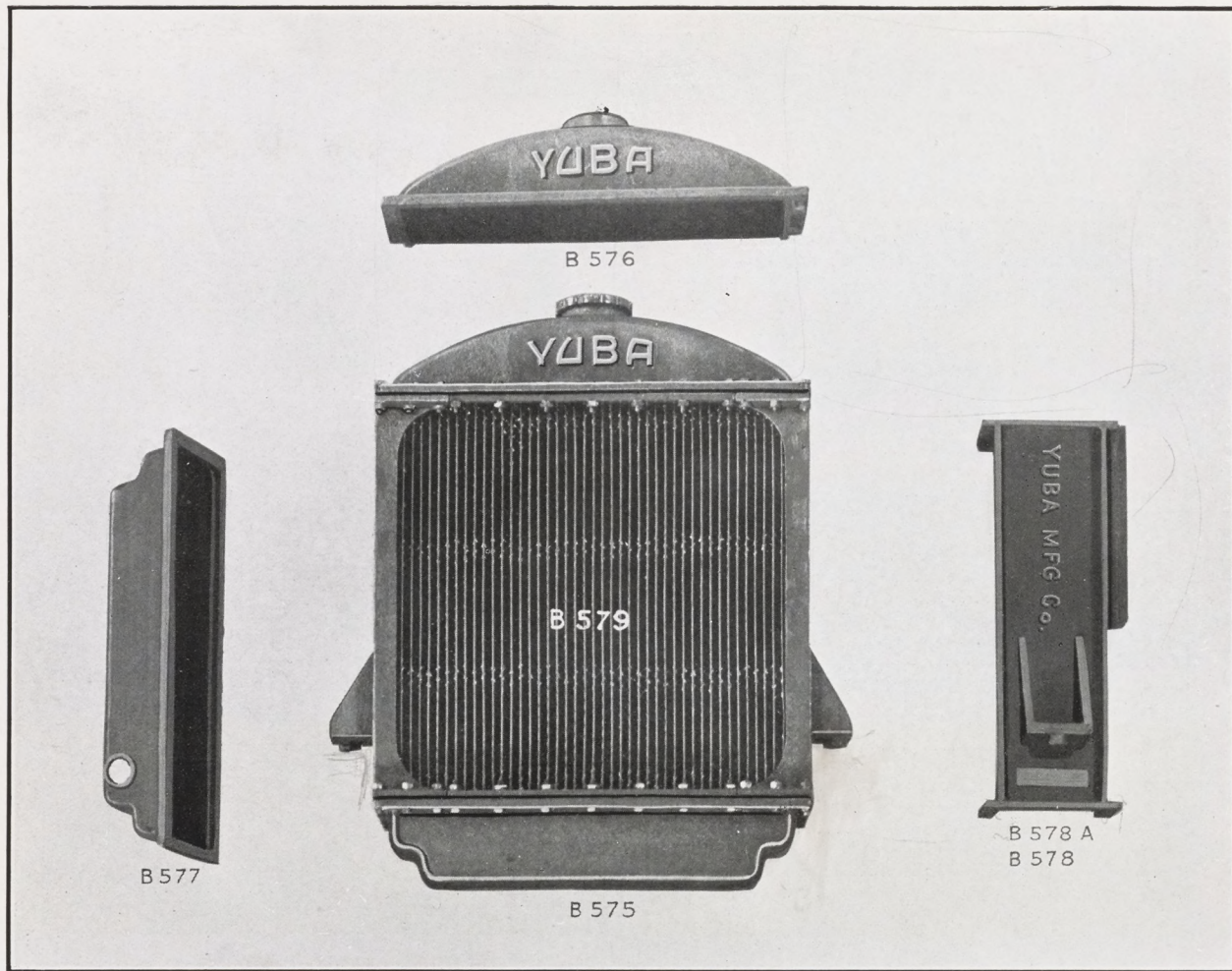


Plate No. 9—Radiator

Model 12/20

BALL RACE AND TREAD—Continued

See Plate No. 8

Part No.	Name of Part	Specifications	Number Required Per Tractor
B-539	Ball race stiffener bolt	$\frac{1}{2}$ " x $3\frac{1}{2}$ "	10
B-542	Light ball race pipe spacer	1" X W. Pipe	4
B-543	Track ball	Steel, $2\frac{1}{4}$ " dia.	224
B-547	Ball race hinge bolt	1" dia.	2
B-549	Ball race bolt	$\frac{3}{4}$ " dia.	12
B-552	Track adjusting nut	Casting	2
B-553	Track spring rod pipe spacers	$1\frac{1}{4}$ " W. Pipe	4
B-555	Tread link pin	Steel Hardened	60
B-556	Tread link bolt	Special, $\frac{9}{16}$ " x $4\frac{1}{4}$ "	120
B-557	Tread link bolt lock washer	$\frac{9}{16}$ "	120
B-558	Track spring rod sleeve	$1\frac{1}{2}$ " XX W. Pipe	2
B-559	Track adjusting rod pipe spacer	$1\frac{1}{4}$ " W. Pipe	4
B-560	Filler washer for ball race bolt		12

Model 12/20

RADIATOR

See Plate No. 9

Part No.	Name of Part	Specifications	Number Required Per Tractor
B-575	Radiator, assembled complete		1
B-576	Radiator, upper tank	Casting	1
B-577	Radiator, lower tank	Casting	1
B-578	Radiator, right side	Casting	1
B-578A	Radiator, left side	Casting	1
B-579	Radiator, core	Sheet Brass	1
B-580	Radiator, hose connection (omitted from plate)	1" W. Pipe, 3" long.	2
B-581	Radiator cap		1
B-582	Radiator top and bottom gaskets		2
B-583	Radiator fan housing		1
B-584	Radiator cap gasket (rubber packing 4 in. diameter)		1
B-585	Radiator drain cock $\frac{1}{4}$ brass tee handle		1
B-586	Radiator support spring	$2\frac{1}{8}$ O. D. 3 lg.	2
B-587	Radiator rebound spring	$1\frac{3}{8}$ O. D. $1\frac{3}{4}$ lg.	2

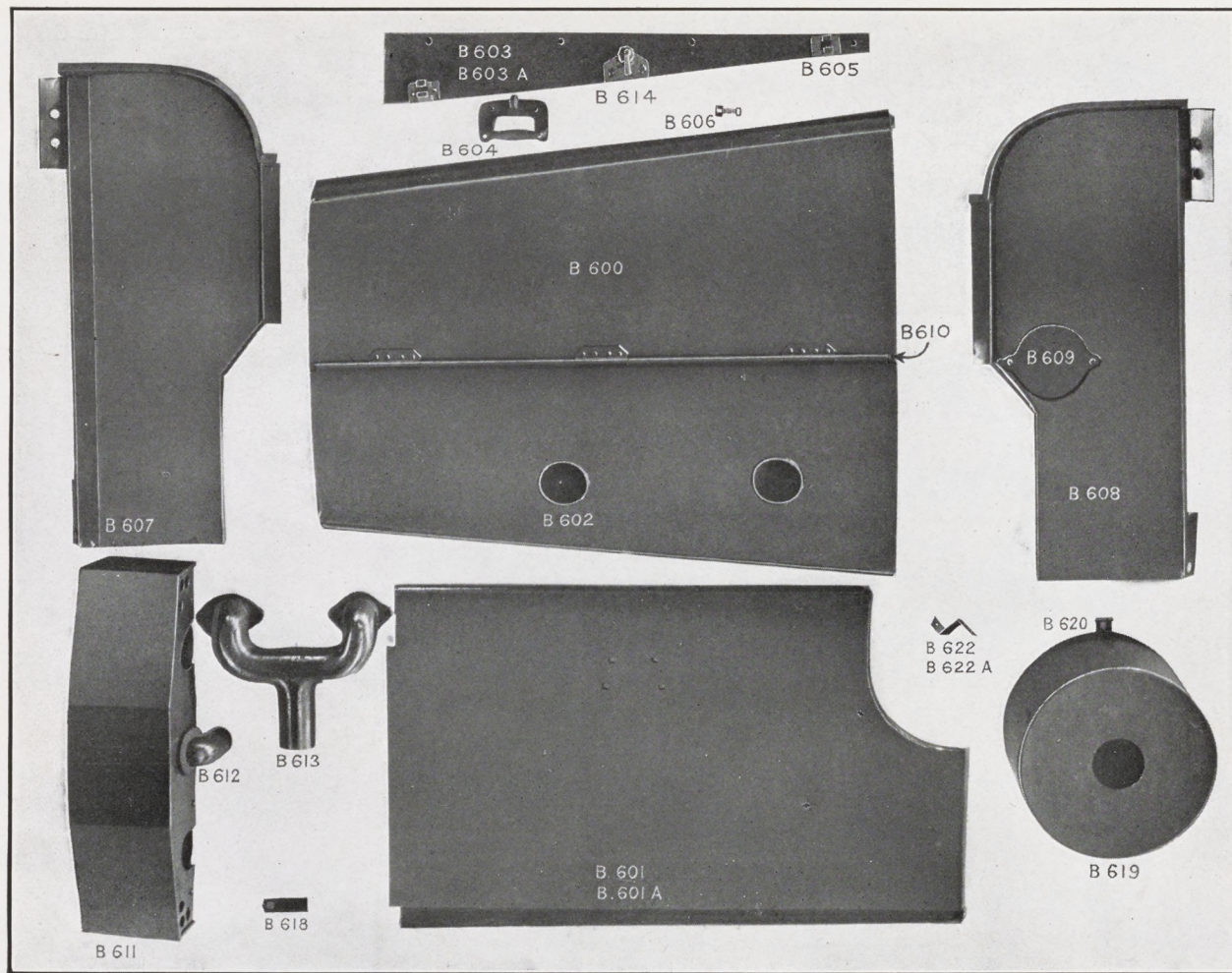


Plate No. 10—Hood, Guards, Etc.

Model 12/20

HOOD, GUARDS, ETC.

See Plate No. 10

Part No.	Name of Part	Specifications	Number Required Per Tractor
B-600	Engine hood—right top	Sheet Steel	1
B-601	Engine hood—right side	Sheet Steel	1
B-601A	Engine hood—left side	Sheet Steel	1
B-602	Engine hood—left top	Sheet Steel	1
B-603	Hood sill—right	Steel Plate	1
B-603A	Hood sill—left	Steel Plate	1
B-604	Hood handle	Casting	2
B-605	Hood holder	Casting	4
B-606	Hood sill holding bolt	$\frac{3}{8}$ " x $1\frac{1}{4}$ "	8
B-607	Left foot guard	Sheet Steel	1
B-608	Right foot guard	Sheet Steel	1
B-609	Cover for foot guard hand hole	Sheet Steel	1
B-610	Engine hood hinge rod	Steel, $\frac{5}{16}$ " dia	1
B-611	Air heater (without outlet elbow)	Sheet Steel	1
B-612	Air heater outlet elbow	Casting	1
B-613	Exhaust manifold	Casting	2
B-614	Hood fastener (consists of hook lift handle, spring and hinge)		2
B-618	Brace for foot guard	Steel	2
B-619	Pulley cover	Sheet Steel	1
B-620	Pulley cover lower clip	Steel	1
B-622	Pulley cover—upper right clip	Steel	1
B-622A	Pulley cover—upper left clip	Steel	1
See Plate No. 11			
B-650	Tool kit		1

B-623	Hood hinge chips	3
B-624	Latch for hood top	2



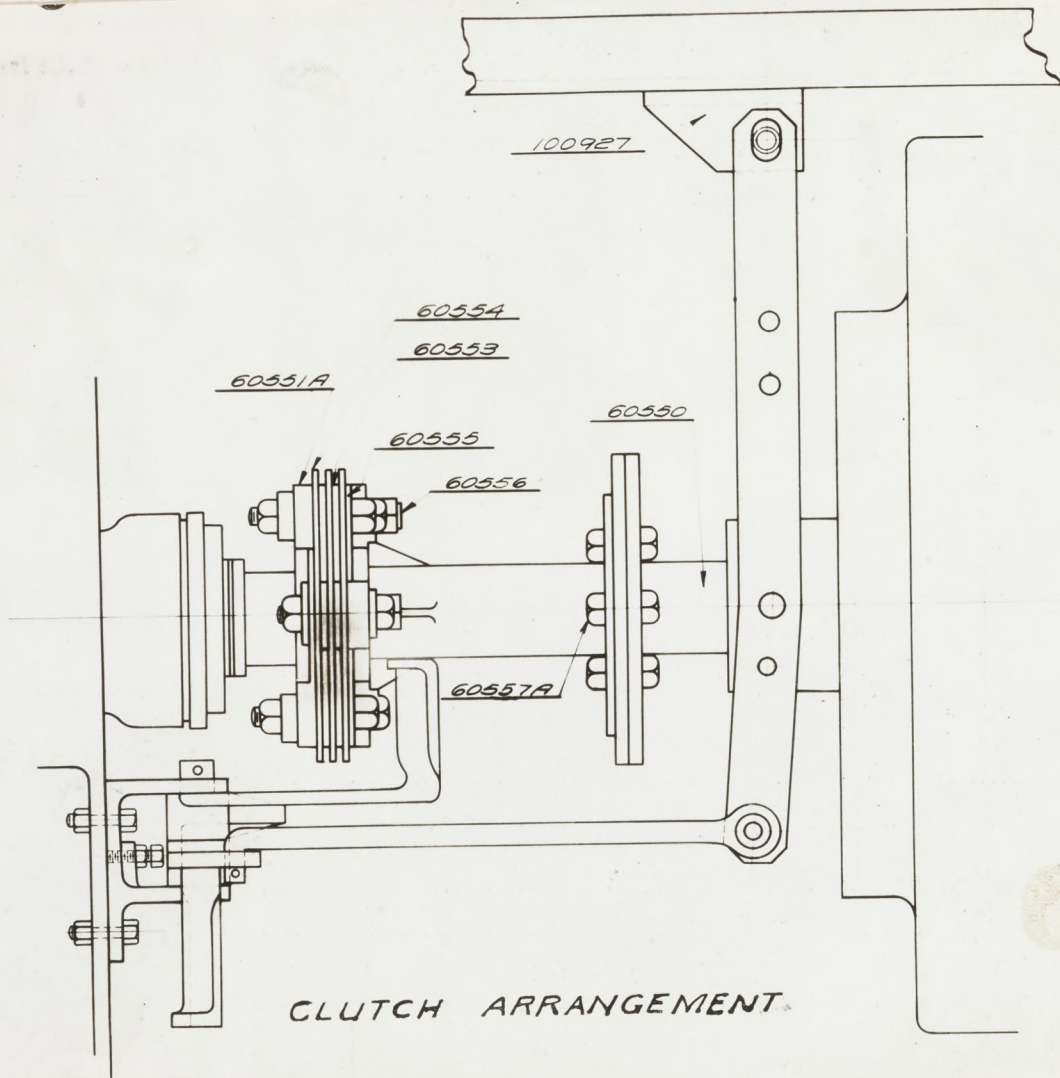
Plate No. 11—Tool Kit (See bottom Page 23)

Part No.	Name of Part	Specifications	Number Required Per Tractor
B-701	Oil Pan.....		1
B-702	Crankcase with bolts and studs.....		1
B-703	Crankshaft.....		1
B-704	Piston, connecting rod and piston pin— assembled complete.....		4
B-705	Connecting rod with bushings (state what cylinder).....		4
B-706	Piston.....		4
B-707	Piston ring.....		12
B-708	Oil trough.....		2
B-709	Intake manifold.....		1
B-710	Engine water inlet manifold.....		1
B-711	Butterfly valve lever housing.....		1
B-712	Valve.....		8
B-713	Valve lifter guide clamp stud (omitted from plate).....		4
B-714	Valve spring.....		8
B-715	Valve lifter, guide, roller and adjusting screw— assembled.....		8
B-716	Valve lifter guide clamp.....		4
B-717	Governor weight.....		2
B-718	Magneto and pump timing gear.....		1
B-719	Valve chamber plug exhaust.....		4
B-720	Valve chamber plug intake.....		4
B-721	Cylinder head plug.....		4
B-722	Fly wheel bolt.....		6
B-723	Valve lifter roller (omitted from plate).....		8
B-724	Valve lifter roller pin (omitted from plate).....		8
B-725	Crankcase handhole cover stud.....		1
B-726	Crankshaft rear bearing cap.....		1
B-727	Crankshaft center bearing cap.....		1
B-728	Crankshaft front bearing cap.....		1
B-729	Crankshaft front bearing bushing—upper half.....		1
B-730	Crankshaft front bearing bushing—lower half (omit- ted from plate).....		1
B-731	Governor center.....		1
B-732	Oil float guide.....		1
B-733	Valve spring cover nut.....		2
B-734	Governor shifter.....		1

(Continued on Page 27)

Part No.	Name of Part	Specifications	Number Required Per Tractor
B-735	Crankcase handhole clamp.....		1
B-736	Crankshaft front bearing shim (omitted from plate) $\frac{1}{32}$ " or $\frac{1}{64}$ " thick.....		2
B-737	Crankshaft center bearing bushing—upper half.....		1
B-738	Crankshaft center bearing bushing—lower half (omitted from plate).....		1
B-739	Crankshaft center bearing shim (omitted from plate).....	$\frac{1}{32}$ " or $\frac{1}{64}$ " thick.....	2
B-740	Connecting rod clamp to piston pin cap screw.....		4
B-741	Butterfly valve lever housing cap screw.....	$\frac{3}{8}$ " x 3".....	2
B-742	Oil trough cap screw.....	$\frac{3}{8}$ " x 1".....	6
B-743	Oil pan cap screw.....	$\frac{3}{8}$ " x $1\frac{1}{4}$ ".....	18
B-744	Crankshaft bearing cap stud and fly wheel bolt nut.....		21
B-746	Connecting rod bearing cap bolt nut.....		8
B-747	Oil trough cap screw lock.....		6
B-748	Valve spring washer retainer.....		8
B-749	Crankshaft rear bearing bushing—upper half.....		1
B-750	Crankshaft rear bearing bushing—lower half (omit- ted from plate).....		1
B-751	Crankshaft rear bearing shim (omitted from plate) $\frac{1}{32}$ " or $\frac{1}{64}$ " thick.....		2
B-752	Connecting rod bushing—upper half.....		4
B-753	Connecting rod bushing—lower half.....		4
B-754	Connecting rod bearing shim (omitted from plate) $\frac{1}{32}$ " or $\frac{1}{64}$ " thick.....		8
B-755	Oil pan bottom cover.....		1
B-756	Connecting rod cap bolt.....		8
B-757	Magneto timing gear shaft end cap.....		1
B-758	Mitre gear case.....		1
B-759	Oil pipe stuffing nut.....		1
B-760	Crankshaft bearing cap bolt (omitted from plate) $\frac{1}{2}$ " x $3\frac{3}{4}$ ".....		9
B-761	Crankshaft bearing cap stud (omitted from plate) $\frac{1}{2}$ " x $4\frac{7}{16}$ ".....		3
B-762	Idler gear shaft (omitted from plate).....		1
B-763	Piston pin bushing (omitted from plate).....		8
B-764	Connecting rod without bushings (state what cylin- der).....		4
B-765	Crankshaft timing gear.....		1
B-766	Oil pipe, oil sump to pump.....		1
B-767	Oil pipe to oil troughs.....		1
B-768	Valve lifter guide (omitted from plate).....		8

(Continued on Page 29)



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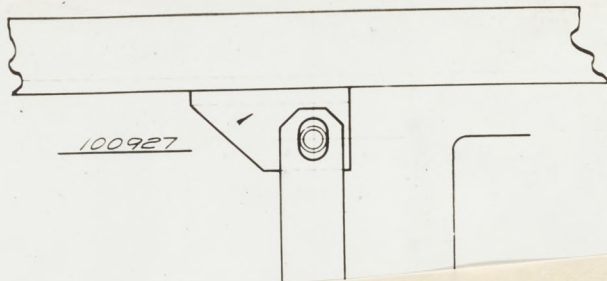
ENGINE—Continued.

See Plate No. 12

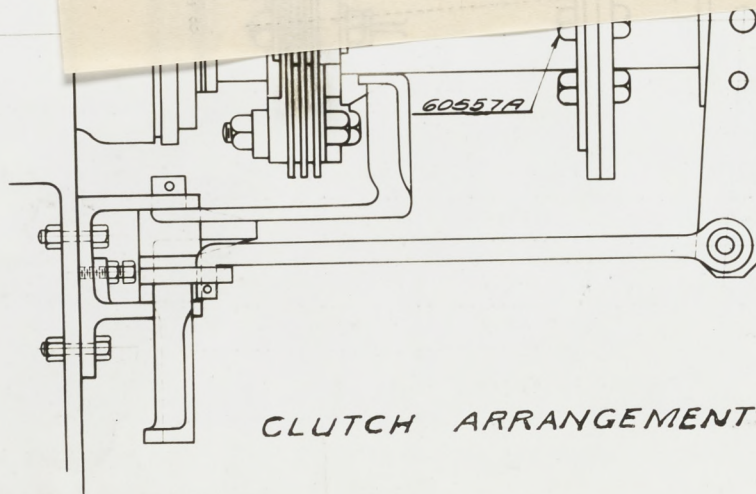
Part No.	Name of Part	Specifications	Number Required Per Tractor
B-769	Valve lifter (omitted from plate)		8
B-770	Valve lifter adjusting screw (omitted from plate)		8
B-771	Valve lifter adjusting lock nut (omitted from plate)		8
B-772	Water pump bearing grease cup		2
B-784	Connecting rod bushing lock screw		16
B-785	Push rod assembled without guide		8
B-786	Push rod yoke stud		4
B-787	Cylinder to case stud washer		12
B-788	Water pipe gasket		1
B-789	Miter gear case gasket		1
B-790	Plug for oil pan bottom		1
B-791	Gasket for oil pan plug		1
B-792	Gasket between oil pan and crank case		2
B-793	Oil pipe fittings $\frac{3}{8}$ compression coupling		3

Part No.	Name of Part	Specifications	Number Required Per Tractor
B-800	Front cylinders		1
B-801	Rear cylinders		1
B-802	Water pump body		1
B-803	Water pump cover		1
B-804	Water pump impeller		1
B-805	Camshaft		1
B-806	Idler gear with bushing		1
B-807	Water pump shaft		1
B-808	Cam shaft timing gear		1
B-809	Cam shaft front bearing housing		1
B-810	Cam shaft oil pump mitre gear		1
B-811	Oil pump shaft mitre gear		1
B-812	Oil pump driving shaft		1
B-813	Mitre gear case cover		1
B-814	Oil pump—assembled complete		1
B-815	Oil pump body		1
B-816	Oil pump gland nut (omitted from plate)		1
B-817	Oil pump shaft (omitted from plate)		1
B-818	Oil pump driving gear (omitted from plate)		1

(Continued on Page 30)



60557A



CLUTCH ARRANGEMENT.

Model 12/20

ENGINE—Continued

See Plate No. 12

Part No.	Name of Part	Specifications	Number Required Per Tractor
B-769	Valve lifter (omitted from plate)		8
B-770	Valve lifter adjusting screw (omitted from plate)		8
B-771	Valve lifter adjusting lock nut (omitted from plate)		8
B-772	Water pump bearing grease cup		2
B-773	Pump coupling—pump end		1
B-774	Governor thrust ball bearing—complete		1
B-776	Water pump bearing cap		2
B-777	Idler gear shaft washer		1
B-778	Valve spring washer		8
B-779	Water pump drain plug		1
B-780	Governor weight roller		2
B-781	Governor weight roller pin (omitted from plate)		2
B-782	Water pump gland nut—right-hand thread		1
B-783	Water pump gland nut—left-hand thread		1

Model 12/20

ENGINE—Continued

See Plate No. 13

Part No.	Name of Part	Specifications	Number Required Per Tractor
B-800	Front cylinders		1
B-801	Rear cylinders		1
B-802	Water pump body		1
B-803	Water pump cover		1
B-804	Water pump impeller		1
B-805	Camshaft		1
B-806	Idler gear with bushing		1
B-807	Water pump shaft		1
B-808	Cam shaft timing gear		1
B-809	Cam shaft front bearing housing		1
B-810	Cam shaft oil pump mitre gear		1
B-811	Oil pump shaft mitre gear		1
B-812	Oil pump driving shaft		1
B-813	Mitre gear case cover		1
B-814	Oil pump—assembled complete		1
B-815	Oil pump body		1
B-816	Oil pump gland nut (omitted from plate)		1
B-817	Oil pump shaft (omitted from plate)		1
B-818	Oil pump driving gear (omitted from plate)		1

(Continued on Page 30)

Part No.	Name of Part	Specifications	Number Required Per Tractor
B-819	Oil pump driven gear (omitted from plate)		1
B-820	Oil pump driven gear shaft (omitted from plate)		1
B-821	Oil pump cover (omitted from plate)		1
B-822	Manifold stud		12
B-823	Manifold stud nut	$\frac{7}{16}$ " A. L. A. M.	12
B-824	Valve spring cover stud		2
B-825	Valve spring cover		2
B-826	Crankcase handhole cover		2
B-827	Flywheel		1
B-828	Camshaft center bearing bushing (omitted from plate)		1
B-829	Camshaft front bearing bushing (omitted from plate)		1
B-830	Timing gear cover		1
B-831	Governor lever		1
B-832	Governor ball thrust bearing housing		1
B-833	Governor bearing housing pin		1
B-834	Governor adjusting screw lock nut		1
B-835	Governor lever shaft (omitted from plate)		1
B-836	Governor rod housing		1
B-837	Governor spring yoke (omitted from plate)		1
B-838	Governor spring yoke pin (omitted from plate)		1
B-839	Governor valve lever (omitted from plate)		1
B-840	Governor butterfly valve (omitted from plate)		1
B-841	Governor rod		1
B-842	Governor ball joint		2
B-843	Governor cover		1
B-844	Governor inner spring (omitted from plate)		1
B-845	Governor spring adjusting screw (omitted from plate)		1
B-846	Governor butterfly valve shaft (omitted from plate)		1
B-847	Governor weight shaft (omitted from plate)		2
B-848	Governor outer spring (omitted from plate)		1
B-849	Governor butterfly valve shaft bushing (omitted from plate)	$\frac{5}{16}$ "	1
B-850	Governor butterfly valve shaft bushing (omitted from plate)	$\frac{7}{32}$ "	1

(Continued on Page 31)

Part No.	Name of Part	Specifications	Number Required Per Tractor
B-851	Governor spring housing		1
B-852	Water pump inlet pipe		1
B-853	Fan belt	Leather, 2" wide, 37" long	1
B-854	Fan driving pulley		1
B-855	Fan assembled complete with shaft and bearings		1
B-856	Fan	Aluminum Casting	1
B-857	Fan shaft	Steel	1
B-858	Fan pulley	Casting	1
B-859	Fan ball bearing (omitted from plate)	20 mm. bore, 47 mm. dia., 14 mm. wide...	2
B-860	Fan felt washer (omitted from plate)	Felt	1
B-861	Fan felt retainer (omitted from plate)	Aluminum	1
B-862	Fan bearing spacer (omitted from plate)	$\frac{3}{4}$ " W. pipe x $2\frac{5}{16}$ "	1
B-863	Fan washer (omitted from plate)	Steel, $\frac{5}{8}$ " I. D., $1\frac{1}{8}$ " O. D., $\frac{1}{8}$ " thick	1
B-864	Fan castle nut (omitted from plate)	$\frac{5}{8}$ " A. L. A. M.	1
B-865	Fan tightener	Casting	1
B-866	Fan bracket	Casting	1
B-867	Fan tightener stud	Steel	1
B-868	Magneto timing gear shaft		1
B-869	Pump coupling—timing gear shaft end		1
B-870	Water pump outlet hose clamp		2
B-871	Water pump outlet hose		1
B-872	Oil level gage float		1
B-873	Oil level gage float wire		1
B-874	Knob on oil level gage float wire		1
B-875	Breather	Casting	1
B-876	Breather cap	Casting	1
B-877	Breather valve (omitted from plate)		1
B-878	Breather stud (omitted from plate)	Steel	1
B-879	Oil level gage sight body		1
B-880	Oil level gage sight body nut		1
B-881	Oil level gage sight glass		1
B-882	Oil level gage leather washer (omitted from plate)		1
B-883	Oil screen with skeleton frame		1
B-884	Oil pipe elbow connection at oil sump		1
B-885	Engine water outlet manifold (omitted from plate)		1
B-886	Idler gear bushing (omitted from plate)		1
B-887	Piston pin		4
B-888	Magneto strap		2
B-889	Lower magneto strap pin		2

(Continued on Page 32)

Part No.	Name of Part	Specifications	Number Required Per Tractor
B-890	Upper magneto strap pin—with tapped hole (omitted from plate)		1
B-891	Upper magneto strap pin—with plain hole (omitted from plate)		1
B-892	Magneto strap screw (omitted from plate)		1
B-893	Oil pump cap screw	Long, $\frac{3}{8}$ " x $2\frac{1}{2}$ "	2
B-894	Oil pump cap screw	Short, $\frac{3}{8}$ " x $\frac{3}{4}$ "	1
B-895	Clutch assembled complete		1
B-896	Clutch facing (omitted from plate)		2
B-897	Clutch pressure plate (omitted from plate)		1
B-898	Clutch driven plate (omitted from plate)		1
B-899	Clutch bearing (omitted from plate)	25 mm. bore, 52 mm. dia., 15 mm. wide	1
B-900	Clutch pressure lever (omitted from plate)		3
B-901	Clutch pressure lever shoe (omitted from plate)		3
B-902	Clutch pressure lever pin (omitted from plate)		3
B-903	Clutch release collar (omitted from plate)		1
B-904	Clutch release sleeve (omitted from plate)		1
B-905	Clutch spring (omitted from plate)		1
B-906	Clutch cover (omitted from plate)		1
B-907	Clutch lever mounting ring (omitted from plate)		1
B-908	Clutch release sleeve nut (omitted from plate)		1
B-909	Clutch release thrust bearing (omitted from plate)		1
B-910	Clutch release bearing housing (omitted from plate)		1
B-911	Clutch release bearing housing cover (omitted from plate)		1
B-912	Clutch brake flange		1
B-913	Clutch brake facing (omitted from plate)		1
B-914	Clutch grease cup		2
B-915	Clutch driven plate center (omitted from plate)		1
B-916	Clutch shaft		1
B-917	Clutch shaft universal joint spider (omitted from plate)		1

B- 919	Ignition cable tube	1
B-920	Ignition cable tube eye	2
B-921	Valve spring cover gasket	2
B-922	Water nozzle in cylinder	2
B-923	Valve chamber and cylinder head plug gasket	12
B- 924	Cylinder base gasket	2
B-925	Cylinder to case stud	8
B-926	Cylinder to case stud	4
B-927	Priming cup	4
B-928	Cylinder drain cock	2
B-929	Valve guide	8
B-930	Crank case door gasket	2
B-931	Magneto shaft bushing in crank case	1
B-932	Main bearing lock screw	12
B-933	Nut for magneto shaft	1
B-934	Water pump gasket	1
B-935	Water pump packing	2
B-936	Water pump bushing	2
B-937	Felt washer for gear cover	1
B-938	Gear cover gasket	1
B-939	Oil pump gasket between pump and pan	1
B-940	Oil pump cover gasket	1
B-941	Pin for miter gear on cam shaft	1
B-942	Pin for miter gear on timer shaft	1
B-943	Flywheel pointer	1
B-944	Governor cover gasket	1

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